

61-25655

Kessler, H. and Winterstein, H.
THE EFFECT OF VARYING THE FINENESS OF
NEW GRAIN-REFINING PREPARATIONS ON VARIOUS
PROPERTIES OF Ga-Si-ALLOYS. [1961] 8p.
Order from ATS \$13.25 ATS-30N54G

Trans. of Zeitschrift für Metallkunde (West Germany)
1950, v. 47, no. 2, p. 97-101.

DESCRIPTORS: *Gallium alloys, *Silicon alloys, Al-
loys, Grains (Metallurgy), Processing.

(Metallurgy--Structural, TT, v. 6, no. 11)

- I. Kessler, H.
- II. Winterstein, H.
- III. ATS-30N54G
- IV. Associated Technical
Services, Inc., East
Orange, N. J.

155710

Office of Technical Services

Earing in the Deep Drawing of Some Aluminum
Alloys With Low Alloying Constituents, by G.
Siebel.

GERMAN, per, Z. Metallkunde, Vol XLVII, No 2,
Feb 1956, pp 102-106.

Alum Lab, Ltd Tr 8-TM-203-57
OT/2475

55,355

Sci - Min/met
Nov 57

62-14463

Gruber, Helmut and Scheidig, Helmut.
THE MELTING OF TITANIUM AND ZIRCONIUM IN
A VACUUM ARC FURNACE. [1962] [35]p. 11 refs.
Order from SLA \$3.60 62-14463
Original copy poor quality; available on loan also

Trans. of Zeitschrift für Metallkunde (West Germany)
1956, v. 47, no. 3, p. 149-159.

DESCRIPTORS: *Titanium, *Zirconium, Melting,
Electric furnaces.

- I. Gruber, H.
- II. Scheidig, H.

(Metallurgy, TT, v. 8, no. 6)

Office of Technical Services

New Aids to Metallographic Examination and Demonstration, by R. Mitsche.

GERMAN. per. Z Metallkunde. Mar 1956, pp 171-175.

ASLIB-1095

Sci

Jul 59

92, 723

The Mechanism of the Electrolytic and
Chemical Polishing of Metals, Especially of
Nickel, by W. Machu and A. Ragheb,
37 pp.

GERMAN, per, Z. Metallkunde, Vol III, 1956,
pp 176-183.

SLA 57-3299

Sci

Aug 58

72,533

Aluminum From Hungary, 2 pp.

GERMAN/^{HO}per, Zeit für Metall, Vol XLVII, No 5,
May 1956, p 42.

CIA/IDD X-2129

ESur - Hungary
Economic
Jul 56 CTS/dex

37,013

Application of Radioactive Methods to Metallurgical
Problems, by G. Glawitsch, 14 pp.

GERMAN, par, Z. Metallkunde, Vol XLVII, 1956,
pp 199-202.

ANC Tr 2556

Sci - Min/metals
Nov 56 CBS

#0, #28

Internal Friction and Shear Modulus of Cold Worked
and Recrystallised Gold, by Koster. UNCLASSIFIED

GERMAN, per, Z Metallkunde, Apr 1956, pp 224-228.

Iron and Steel Inst

Co-op Tr ~~SV~~ SV

Tr 950

CTS 61-12421

Sol. - Min/Met
Aug 58

68,863

On the Investigation of Particle Size and Lattice
Distortion by X-Ray Reflections, by V. Huml,
C. Hummel, 11 pp.

GUTCHMAN, per, Zeit Metallk., Vol. XLVII, 1956,
pp 254-260. 9207220

AEC/TSC Infor Ser 107(C)

Sci - Phys

23 2,196

May 63

Influence of Additions on the Electric
Conductivity of Copper. I. Electric Con-
ductivity of Pure Copper, Maximum Value of
Such Conductivity and the Influence of 10p.
Additions Thereon, by F. Pawlek, K. Reichel.
GERMAN, per, Zeitschrift fuer Metallkunde,
Vol 47, No 6, 1956, pp 347-356.
SLA TT-66-10431

ATS - 926326

519-6J

Sci-MEM
Jul 66

306,063

Influence of Additions on the Electric
Conductivity of Copper. II. Effect of
Several Metallic Impurities and Oxygen
on the Electric Conductivity of Copper,
by F. Pawlek, K. Viessmann. 9 p.
GERMAN, per, Zeit. fuer Metallkunde, Vol 47,
No 6, 1956, pp 357-363.
SIA TT-66-10430

ATS 93 L326
520-65

Sci-M&M
Jul 66

306,062

Intermediate Grain-Refining During
Recrystallization of Copper, by H. Borchers,
A. Schaefer. 8 p.
GERMAN, per, Zeit. fuer Metallkunde, Vol 47,
No 6, 1956, pp 382-389.
SIA TT-66-10429

Sci-M&M
Jul 66

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Patzak, Ingeborg.
THE STRUCTURE AND POSITION OF THE PHASES
IN THE SYSTEM COPPER-TELLURIUM. [1963] 4p.
(figs. tables omitted).
Order from SLA \$1.10 63-18453

Trans. of 2nd [detached] [fir] Metallurgische (W. st Germany)
1956, v. 47, p. 418-420.

DESCRIPTORS: *Copper, *Tellurium, *Phase studies,
Copper compounds, Tellurides, Chemical reactions,

(Metallurgy--Structural, TT, v. 10, no. 12)

63-18453

I. Patzak, I.

Office of Technical Services

Studies of the Titanium-Aluminum System, by K. Sagal,
E. Schulz, W. Zwickler.

RESEARCH, per, Z. Metallkunde, Vol XLVII, No 8, 1956,
pp 529-534.

Henry Bratcher Tr No 3909
\$5.90

47,049

sci - Min/Metals
Apr 1957 CIB/dex

The Systems Ti-Al-Cr and Ti-Al-V and the Industrial Ti-Alloys Containing 5% Cr and 3% Al, and those Containing 6% Al and 4% V, by U. Zwicker. 27p.

GERMAN, per, Zeitschrift fuer Metallkunde, Vol 47, No 8, 1956, pp 535-548.
SLA TT-66-10415

Sci-Materials
Oct 66

313,221

The Damping Characteristics of Hydrogen-Laden
Ti., by W. Koster.

GERMAN, per, Z. Metallkde., Vol 47, 1956,
pp 564-569.

*NTIS/USDC/NBS TT 71-55061

Available NBS Only

May 71

Damping Behavior of Titanium Containing
~~Hydrogen~~ Hydrogen, by W. Koester, L. Bangert,
and M. Evers, 13 pp.

GERMAN
Z. Metall., Vol XLVII, No 8,
1956, pp 564-570.

Assoc Tech Serv
527180

Sci
Aug 58

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On the Oxidation of Titanium, by W. Kinna, W. Knorr,
GERMAN, par, Z. Metallkunde, Vol XLVII, No 8, 1956,
pp 594-598.

ASLIB-GE85

Sci

Aug 59

95, 703

Etching of Single Crystals of Germanium,
by H. A. Schell.
GERMAN, per, Zeitschrift fuer Metallkunde,
Vol 47, No 9, 1956, pp 614-620.
SLA TT-66-10437

Sci-M&M
Jul 66

306,067

A New Counter Goniometer for Determining the Texture
of Sheet Materials, by Reff. UNCLASSIFIED

GERMAN, per, Z Metallkunde, Sep 1956, pp 646-649.

Co-op Tr Sch
Tr 910

Sci - Eng, Instruments
Jul 58

67,680

Determination of the Fibre Textures of Wires by
Means of a Counter-Tube Sonometer, by Haccaner.
UNCLASSIFIED

GERMAN, per, Z Metallkunde, Vol IX, 1956, pp
649-652.

Iron and Steel Inst

Co-op Tr Sch SV
Tr 951

Sci - Engr
Aug 58

68,864

Electrodeless Measurement of Electrical Conductivity
Using the Rotating Field Method, by Albert Roll,
Hans Felger, Hasso Motz, 11 pp.

GERMAN, per, Z fuer Metallkunde, Vol XLVII, 1956,
pp 707-713. 9093620

AEC Tr-4785

Sci - Engr
Dec 61

177,404

Texture and Baring of Pure Aluminum Sheet From
Continuously Cast and Permanent Mould Cast Metal,
by F. Haessner, G. Masing, H. P. Stuwe, 21 pp.

GERMAN, per, Z Metallkunde, Vol XLVII, No 12,
1956, pp 743-750.

SLA 57-3490

Sci
Aug 59

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Diamond as a New Grinding and Polishing
Material, by R. Vogel, 5 pp.

GERMAN, par, Z. Metallkunde, Vol XLVII, No
12, 1956, pp 775-777.

Assoc Tech Serv
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Sci

Aug 58

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Processes in the Heat-Treatment of Oxygen-Containing
an Oxidised Tantalum, by E. Gebhardt, H.
SEHN Seghezi.

GERMAN, per, Z. fuer Metallkunde, Vol X, 1957,
pp 559-561.

CSIRO

Sci - Min/Met
Aug 62

211, 474

Etching Test With Gallium Arsenide, by Hans Achim
Schall, 6 pp. UNCL.

GERMAN, par, Z. fuer Metallkunde, Vol XLVIII,
No 4, 1957.

ACSI H-3086
ID 215879

Sci - Chem
Mar 61

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On the Mechanism of Formation of Mercury-Free
Alloys in Amalgamation Reactions, by F. Lihl
and H. Kirmbaurer, 17 pp.

GERMAN, per, Z. Metallkunde, Vol XLVIII, 1957,
pp 9-15.

SLA 57-2935
AEC Tr 3015

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Aug 58

71,421

Bunge, Hans-Joachim and Müller, Horst Guido.
ON THE MAGNETIC ROLLING ANISOTROPY OF
CUBIC FACE-CENTERED IRON-NICKEL ALLOYS.
[Thesis Halle U. (East Germany) 1955. [1963] 15p 15
15refs

Order from SLA \$1.60

63-20327

Trans. of Zeitschrift für Metallkunde (West Germany)
1957, v. 48, p. 26-32.

DESCRIPTORS: Thesis, *Nickel alloys, *Iron alloys,
*Anisotropy, Rolling mills, Cold working, Heat treat-
ment, Magnetic properties, Crystal structure.

The magnetic anisotropy of reversible Fe-Ni alloys was
measured after cold-rolling as a function of the degree
and direction of rolling and of heat treatment. The re-
sults are interpreted in terms of disorder affecting the
unit cell of the FeNi₃ superstructure. The direction
and relative magnitude of the anisotropy are calculated
and compared with experiment. (Author)

63-20327

- I. Title: Cubic metals
- I. Bunge, H. -J.
- II. Müller, H. G.
- III. Halle U. (East Germany)

(Metallurgy, TT, v. 10, no. 10)

Office of Technical Services

Influence of Recrystallization on Damping and
Shear Modulus of Tungsten Wires, by W. Schilling,
R. Haspel, 8 pp.

GERMAN, per, Z Metallkunde, Vol. XLVIII, 1957, pp
32-34.

AERE Tr 11/3/5/1150

Sci - Chem

May 59

86,166

Investigations of the Structure and Strength
Properties of Die-Stampings of Al Cu Mg and
Zn Al Zn Cu Mg Alloys, by H. Rosenkrantz.

GERMAN, per, Z Metallkunde, Vol. XLVIII, No 2,
1957, pp 41-53.

T.I.L. Tr 4798

Sci - *min/met*
~~Chemistry~~
Jun 57

48, 528

Some Results of High-Vacuum Metallurgy, by W. Scholze.

GERMAN, Ger, Z. Metallkunde, Vol XLVIII, No 3,
1957, pp 91-100.

Drutcher Tr 4111
\$7.80

Sci - Min/met
Jul 58

66, 2109

On the Oxidation of Germanium, by O. Roesner.

GERMAN, per, Z. Metallkunde, Vol. XLVIII, No 3,
1957, pp 137-141.

ASLIB-GB4

Sci
Aug 58

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Metallographic Preparation of Noble Metal
Samples by Electrolytic Lapping, by Gerhard
Reinacher, 30 pp.

GERMAN, per, Z fuer Metallkunde, Vol XLVIII,
1957, pp 162-170.

~~SECRET~~
ABC Tr-4130
*TIL T 5118

Sci - Min/Met
14 Oct 60

128,922

Construction of a Heating Table for High Temperature
Microscopy With Examples of Applications, by I.
Pfeiffer. UNCL

GERMAN, per, Z fuer Metallkunde, Vol XLVIII, No 4,
1957, pp 171-175.

*TIL T 5117

Sci - Min/Met; Phys
May 60

The Electrical Resistance of Metallic Melts, I.
Methods of Measurement and Electrical Resistance
of Molten Pure Metals, by A. Roll, H. Motz. UICL

GERMAN, per, Z fuer Metallkunde, No 5, 1957,
pp 272-280.

Fulmer 122

Fulmer Research Institute Limited
Stoke Poges, Bucks.

Sci - Min/Mat
Apr 60

SR/23/60 114, 456

Stress Corrosion Tests on AlZnMg 1, by
K. Dias. URCL

GERMANN, per, Z Metallkunde, Vol XLVIII,
1957, pp 289-296.

Fulmer Res. Inst
111 OT/3179

Sci - Hin/Net; Chem
Jan 59

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Behaviour Of Granular and Subgranular Boundaries
In the Reaction Between Aluminium and Water by
D.Altenpohl.

GERMAN, per, Zeitschrift Fur Metallkunde, Vol XLVIII,
No 5, 1957, pp 306-312.

CSIRO

Oct. 62

On Iron-Silicon Alloys With Orientated Structure,
by F. Assmus, et al.

GERM AN, per, Z Metallkunde, Vol XLVIII, Jun
1957, pp 341-349.

Co-op Tr Sch Tr 712

Sci - Min/met
Jan 58

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Measurement of the Diffusion Coefficient and
Solubility of Hydrogen in Aluminum and Copper,
by W. Michener, A. Pebler, 15 pp.

GERMAN, per, Z Metallkunde, Vol XLVIII, 1957,
pp 373-378.

ASC 3360

Sci - Chem

Oct 58

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Working Up of Scraps Containing Copper,
by W. F. Keiser,

GERMAN, per, Z fuer Metallkunde,
Vol XLVII, No 7, 1957, pp 404-409.

CSIRO

Sci - Min/Met
Dec 61

175, 789

Gebhardt, Erich and Seghezzi, Hans-Dieter.
SOLUTION AND OXIDATION IN THE SYSTEM
TANTALUM-OXYGEN. [1961] 22p. 12 refs.
Order from SLA \$2.60

61-14909

Trans. of Zeitschrift für Metallkunde (West Germany)
1957, v. 48, no. 9, p. 503-508.

DESCRIPTORS: *Tantalum, *Oxygen, *Oxidation,
*Solubility. Chemical reactions.

(Chemistry--Physical, TT, v. 6, no. 1)

61-14909

I. Gebhardt, E.
II. Seghezzi, H.-D.

161764

Office of Technical Services

Experiments on Eutectic Crystallization, by E. Scheil,
R. Zimmermann. UNCL

GERMAN, per, Z, Metallkunde, Sep 1957, pp 509-516.

*British Iron and
Steel Ind 1314

CSIRO

Sci - Min/Met
May 59

Investigation by the Electron Emission Microscope
of the Carburisation of Molybdenum From the Gas
Phase, by H. B. Bas, W. Apprecht, L. Preuss, 14 pp.

GERMAN, per, Z Metallk, Vol XLVIII, 1957, pp 516-522.

AEC-~~SP~~-Tr-240

Sci - Min/Net

Sep 59

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The Ternary System Cobalt-Nickel-Vanadium, by
Werner Koster, Franz Sperner, 9 pp.
GERMAN, per, Z. Metall. Vol 48(10), 1957,
pp 540-543.
AEC/ORNL/Tr-2018-68

Sci/Material
Feb 69

374,238

Conductivity and Hall Constant: II. The Solid
Solution Series $\text{Co}_3\text{V} - \text{Ni}_3\text{V}$, by Werner Koster,
Franz Sperner, 15 pp.
GERMAN, per, Z. Metallkde, Vol 48(10), 1957,
pp 544-549.
AEC/ORNL/Tr-2019-68

Sci/Materials
Feb 69

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Application of the Cold Pilger Process and
Comparison With Cold Drawing, by Newmann. UNCLASSIFI

GERMAN, per, Z Metall, Vol XLVIII, Oct 1957,
pp 564-568.

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~~Co-op. Dis. Info.~~
Dis. Tr 804
(L3.0.0)

Sci - Min/Met
Apr 58

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Magnetic Measurements in the Copper-Manganese
System, 27 pp.
GERMAN, per, Z. Metallk., Vol 48, 1957, pp 571-582.
AEC/OIGL-Tr-2398-70

Sci/Mater
Dec 70

Conductivity and Hall Constant. IV. Copper-Nickel
Alloys, by Werner Koester, Wolfgang Schuele, 10 pp.
GERMAN, per, Z fuer Metallkunde, Vol XLVIII,
1957, pp 592-594. 9222970
AEC-Tr-6344

Sci-Mar & Met
Jun 64

260,496

Study of Internal Friction Metal Melts, by
A. Hrbek.
GERMAN, per, Z. Metallkde., Vol 43, 1957, pp 603-605.
*ITIS/USDC/NBS TT 71-55054
Available NBS Only

May 71

Ultrasonic Wave Field and Its Use for Testing
Materials by the Dip Process, by Krautkramer.
UNCLASSIFIED

GERMAN, per, Z Metallkunde, Vol XLVIII, 1957,
pp 606-609.

Henry Bratcher Tr

Sci - Phys
Apr 58

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Metallographic Preparation of Noble Metal Samples From
a Microtone, by P. Grodzinski.

GERMAN, per, Z. Metall., Vol 48, 1957, pp 61-61i.

*NTIS/USDC/NBS TT 71-55068

Available NBS Only

May 71

Grinding Disposition of
Tungsten Powders and Tungsten Carbide Powders,
by H. Kunkin, et al. UNCL

GERMAN, Ger. Z Metallkunde, No 12, Saarbruecken,
1957, pp 619-624.

UTS 61-17826
British Iron and
Steel Ind 1092

Sci - Min/Mat
Apr 59

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Diffusion of Oxygen in Tantalum, by E. Gebhardt,
H. D. Seghizzi, A. Stegherr, 7 pp.

GERMAN, per, Z fuer Metallkunde, Vol XLVIII,
No 12, 1957, pp 624-627.

Assoc Tech Serv 61K260
5.95

Sci - Phys
OTS I, 4
Apr 59

85,252

Induction Furnaces for Melting Heavy and
Light Metals, by J. Testmann.

GERMAN, per, Z fuer Metallkunde, Vol XLVIII,
No 12, 1957, pp 641-646.

CSIRO

Sci - Engr
Dec 61

175,790

An Explanation of Interference Errors Occurring
Systematically in X-Ray-Fluorescence-Spectroscopic
Measurements and Means Whereby These Interference
Errors May Be Eliminated, by F. Ebert, A. Wagner,
UNCL

GERMAN, per, Z Metallkunde, Dec 1957, pp 646-649.

OTS 62 10462
British Iron and
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(12 15u.Od.)

Sci - Phys
Sep 59

96,349

Single Crystals and pu-Layer Crystals of Aluminum
Antimonide, by Schell, Hans Achim, Erlanger,
13 pp.

GERMAN, per, Z fuer Metallkunde, Vol XLIX, No
3, 1958.

Engr Res Devel Lab T-383

Sci - Min/Mat

Dec 58

78,282

125034 (ORNL-tr-2541) 5 DEFORMATION ANISOTROPY OF
ORDERED MIXED CRYSTALS. 6 Bunge, Hans-Joachim. 10 Trans-
lated by R. Gregg Mansfield (Oak Ridge National Lab., Tenn.),
from 15 Z. Metallk.; 49: 40-2(1958). 20 8p. 24 Dep. NTIS.

24 physics (solid-state); translations 27 20L

28 MN-34 29 P NSA

Determination of the Volume of a Molten Metal
Bath in the Arc Furnace When Melting Titanium,
by Alexei Novikov, Robert Frommer.

GERMAN, per, Z fuer Metallkunde, Vol CXIX, No 4,
1959, pp 199-201.

Dept of Interior
TN7, E57, No 118

Sci - Min/Met

Nov 59

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Investigation of the Age-hardening Process in a
Constant Temperature Gradient, by H. Boehn,

GERMAN, per, Zeit fur Metallkunde, Vol XLIX, No 4,
pp 190-194, 1958,

C.S.I.R.O.

Sci/- Min/Met - Metallurgy

May 60

116,360

Rate of Twinning in Zinc Single Crystals, by Ro
Siems, Peter Haasen, 25 pp.

GERMAN, per, Z fuer Metallkunde, Vol XLIX, 1958
pp 213-220. 9077347

X ABC F UCRL-Trans-653(L

Sol - Min/Met

Jun 61

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A New Method for Thickness Measurement (Ultra-
sonic Velocity Measurement), by L. Nikles.
UNCL.

GERMAN, per, Z Metallkunde, Mar 1958,
pp 152-155.

British Iron and
Steel Ind 10/59
(12 10s.0d.)

Sci - Min/Met; Phys
Feb 59

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Acoustic Effects in Phase Transitions in
the Lead-Tin System, by H. Borchers, J.
Kaiser.
GERMAN, par, Zeit. für Metallkunde,
Vol 49, pp 95-101, 1958 9229832
AEC UCRL-TY-1217(L)

Sci-MMM
Nov 68

291,982

TT-64-14804

I. Anderko, K.

Anderko, Kurt.
CONTRIBUTION TO THE BINARY SYSTEMS OF
TITANIUM WITH GALLIUM, INDIUM, AND
GERMANIUM AND OF ZIRCONIUM WITH GALLIUM
AND INDIUM. [1964] 16p (figs tables omitted) 25refs
Order from SLA \$1.60 TT-64-14804

Trans. of Z[eitschrift für] Metallkunde (West
Germany) 1958, v. 49, no. 4, p. 165-172.

(Metallurgy--Nonferrous Metals, TT, v. 11, no. 11)

Office of Technical Services

Diffusion and Solubility of Hydrogen in Alpha-Iron and Silver, by W. Eichenauer, et al. UNCL

GERMAN, per, Z Metallkunde, May 1958, pp 220-225.

British Iron and
Steel Ind 1238
(13 10s. cd.)

CT 5 61-70653

Sci - Min/Met
May 59

86,774

Development of Cold Pressure Welding, by Wilhelm
Hofmann, Hans-Jurgen Schuller, 31 p.

GERMAN, per, Zeit fur Metallkunde, 1958,
Vol XLIX, No 6, pp 302-311.

SLA 59-17494

Sci
Feb 60
Vol 2, No 9

107,088

Process for the Improvement of Various Properties of AlMg-Alloys, by H. Kessler, 6 pp.

GERMAN, per, Z fur Metallkunde, Vol XLIX, No 6, 1958, pp 312-316.

2 ATR-29M54G

Sci

Mar 62

Vol VII, No 3

188, 092

Calorimetric Investigations on Transformations
in Copper-Beryllium, by B. Hilschaer.

GERMAN, per, Z Metallkunde, Vol XLIX, No 7, 1958,
pp 349-356.

Fulmer Res Inst
Stoke Poges, Bucks.

Sci. - Min/Met

Sep 60

126,110

The Ternary System - Gallium-Arsenic-Zinc, by
W. Koster, and W. Ulrich, 8 pp.

GERMAN, per, Z für Metallkunde, Vol XLIX, No 7, 1958,
pp 361-364. 9068980

A.C.S.I.L. Tr No 1263

Sci -
Jan 63

219,391

Isomorphism of the Type A_{III} Compounds, by
W. Hoster and W. Ulrich, 7 pp.

GERMAN, per, Zeitschrift für Metallkunde, Koblenz,
Vol XLIX, No 7, 1978, pp 365-367. 9201293

A.O.S.I.L. Tr No 1264

Sci - Chem
Feb 63

222,561

Isomorphism of the Type AXL_3V Compounds, by
W. Ruster and W. Ulrich, 7 pp.

Chemie, par, Zeitschrift für Metallkunde, 1958, Vol. XLIX, No 7, 1958, pp 365-367. 9201293

A.C.S.I.I. Tr No 1264

Sol - Chem
Feb 63

222,561

The Detection of Impurities and Cold-Working in
Sintered Tungsten by the Measurement of Residual
Resistance, by Erich Krautz, Hermann Schultz,
7 pp.

GERMAN, per, Z fuer Metallkunde, Vol XLIX,
1958, pp 399-403.

AEC-tr-5315

Sci -M/n

Jan 63

list 74

218,848

Agency: Picatinny Arsenal E-10695-D
P. O. Req. 18-70b 14 Aug. 69

Title: Physical Properties of Superstructures with
Discontinuities. pp. 443-9. 7pp

Author: Koster, W. and W. Lang.

Source: Z. Metallk. Vol. 49. (1958).

Language: German.

Special instruction: Please translate & type 1 copy only.

63-18818

Lohberg, Karl and Westpahl, Herbert.
RETROGRESSION AND RECONSTRUCTION OF THE
OMEGA-STRUCTURE IN TITANIUM-VANADIUM AND
TITANIUM-MOLYBDENUM ALLOYS. [1963] 15p (figs
[refs] omitted)
Order from SLA \$1.60 63-18818

Trans. of Z[eitschrift für] Metallkunde (West
Germany) 1958, v. 49, no. 9, p. 449-455.

DESCRIPTORS: *Molybdenum alloys, *Titanium alloys,
*Vanadium alloys, Hardness, Annealing, Heat treat-
ment, Phase studies.

The formation and retrogression of the ω -structure of
titanium-molybdenum alloys were investigated at
various temperatures by means of hardness, length-
change, and susceptibility measurements, and by means
of X-ray-graphic and metallographic observations. For
(Metallurgy--Structural, TT, v. 10, no. 10) (over)

Office of Technical Services

Various Effects of Vacuum Melting on the Gas
Content of Metals, by I. Pfeiffer. UNCL

GERMAN, par, Z fuer Metallkunde, Sep 1958,
pp 455-460.

British Iron and
Steel Ind 1317

Sci - Min/Met; Phys
Aug 59

*Dept. of Defense
TN 9887 10641*

93,436

Hartman, Helmut, Hofmann, Wilhelm, and Gerhard, S.
OXYGEN DETERMINATION IN ZINC AND MAGNE-
SIUM. [1961] (refs., 2 tables omitted).
Order from SLA \$1.10

61-20692

Trans. of Z[eitschrift für Metallkunde] (Germany)
1958, v. 49 [no. 9] p. 461-463.

DESCRIPTORS: *Zinc, *Magnesium, Chemical anal-
ysis, *Oxygen, Determination.

The procedure is based on $\text{ZnO} + \text{H}_2\text{S} = \text{ZnS} + \text{H}_2\text{O}$.
Hydrogen sulfide was conducted over the zinc melt at
550° with hydrogen as carrier. The water which is
formed is caught in a U-shaped absorption tube with
phosphor pentoxide and weighed. In this manner oxy-
gen content between 0.0004 and 0.0006% was deter-
mined for various types of zinc in compact form. Re-
sults show that the determination of O_2 in metallic mag-
nesium is made in the same way as in zinc. (Author)

61-20692

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